



AMERICAN ACADEMY *of* ACTUARIES

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Mr. Philip Barlow
Chair, National Association of Insurance Commissioners (NAIC)
Life Risk-Based Capital (E) Working Group (“LRBC WG”)

Mr. Michael Boerner
Chair, NAIC
Life Actuarial (A) Task Force (“LATF”)

Dear Philip and Mike:

This cover letter describes an accompanying updated spreadsheet that the American Academy of Actuaries¹ (Academy) Economic Scenario Generator Work Group Field Test Subgroup has developed.

The spreadsheet is primarily an extension of the one used in the 2015 C-3 Phase 1 field test. That field test spreadsheet had been expanded to accommodate 200 scenarios, in addition to the standard 50 scenarios used in C-3 Phase 1, and to calculate a conditional tail expectation (CTE) 90 metric, in addition to the C-3 Phase 1 metric that spans the 92nd through 98th percentiles, with the heaviest weight at the 95th percentile. As you know, the CTE 90 metric was the metric in use for C-3 Phase 2 back in 2015.

The new spreadsheet has been further extended to accommodate 1,000 scenarios and 100 projection years, and to calculate additional CTE metrics, namely CTE 70 and CTE 98. While the spreadsheet originated in a C-3 Phase 1 framework, it might be used with some other frameworks if the relevant surplus positions and semiannual interest rates for discounting are loaded into the spreadsheet. This would not be the case for the Direct Iteration approach for VM-21 and C-3 Phase 2. If Direct Iteration is used, regulators may wish to gather a single result for each scenario, in place of a stream of surplus positions and corresponding discount rates.

The new spreadsheet also includes some additional documentation. Though the spreadsheet has been peer reviewed, it is provided on an “as is” basis with no warranty or guarantees of completeness, accuracy, reliability, or usefulness. Use of this spreadsheet is at the user’s own risk. We assume no responsibility or liability for any errors or omissions. Under no circumstance shall the Academy or its volunteers be liable for any damages arising out of your access to or use of the spreadsheet, whether or not the damages were foreseeable and whether or not the Academy was advised of the possibility of such damages.

Sincerely,

Link Richardson, MAAA, FSA, CERA
Chairperson, ESG Field Test Subgroup
American Academy of Actuaries

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.